

ABSTRACT

A system for providing notification, to the associated operating system, of removal and replacement of I/O devices during operation of a multiprocessor computer system running multiple operating systems. The system includes a plurality of cells, each containing multiple RISC processors, low-level I/O firmware, a local service processor, scratch RAM, external registers, a memory and I/O manager, and interfacing hardware. Each partition comprises one or more cells and runs its own operating system (OS). Each cell is connected to a peripheral backplane containing a plurality of peripheral I/O card slots via a switch on the system backplane, which also connects the cell to a supervisory processor, which sends card slot status information to the appropriate cell. Each I/O (typically PCI) card slot has an associated latch which provides an indication, to the supervisory processor, that a platform event has occurred. Platform events include inserting or removing an I/O (peripheral device interface) card to/from a card slot, and opening an access panel that provides access to the I/O cards.